

## EAST Search History

| Ref # | Hits | Search Query                                | DBs                | Default Operator | Plurals | Time Stamp       |
|-------|------|---|--------------------|------------------|---------|------------------|
| L1    | 67   | (giuseppe same rossi).in.                   | US-PGPUB;<br>USPAT | AND              | ON      | 2008/01/22 16:26 |
| S1    | 5732 | xu.in.                                      | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 14:51 |
| S2    | 8    | xu-weize.in.                                | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 15:25 |
| S3    | 1    | ("6377304").PN.                             | US-PGPUB;<br>USPAT | OR               | OFF     | 2006/12/12 16:19 |
| S4    | 297  | (348/243).CCLS.                             | US-PGPUB;<br>USPAT | OR               | OFF     | 2006/12/12 17:16 |
| S5    | 343  | "dark reference"                            | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:17 |
| S6    | 0    | S5 near simultaneous                        | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:17 |
| S7    | 69   | S5 and simultaneous                         | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:17 |
| S8    | 26   | S5 and "differential amplifier"             | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:19 |
| S9    | 1    | "dark reference" near readout               | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:20 |
| S10   | 1393 | simultaneous pixel processing.ti.           | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:21 |
| S11   | 0    | (simultaneous and pixel and processing).ti. | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:21 |
| S12   | 4    | (simultaneous and pixel).ti.                | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:23 |
| S13   | 0    | (row-by-row and pixel).ti.                  | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:23 |
| S14   | 1    | ("dark reference" and pixels).ti.           | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/12 17:24 |
| S15   | 25   | (column and pixels).ti.                     | US-PGPUB;<br>USPAT | AND              | ON      | 2006/12/14 08:19 |
| S16   | 159  | (348/300).CCLS.                             | US-PGPUB;<br>USPAT | OR               | OFF     | 2006/12/14 08:48 |
| S17   | 143  | (348/301).CCLS.                             | US-PGPUB;<br>USPAT | OR               | OFF     | 2006/12/14 09:03 |
| S18   | 89   | (348/319).CCLS.                             | US-PGPUB;<br>USPAT | OR               | OFF     | 2006/12/14 09:06 |
| S19   | 64   | (348/324).CCLS.                             | US-PGPUB;<br>USPAT | OR               | OFF     | 2006/12/14 09:08 |
| S20   | 756  | (348/241).CCLS.                             | US-PGPUB;<br>USPAT | OR               | OFF     | 2006/12/14 09:09 |

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|     |      |   |                    |     |     |                  |
|-----|------|---|--------------------|-----|-----|------------------|
| S21 | 183  | S20 and (differential amplifier)  | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 09:09 |
| S22 | 183  | S20 and (differential amplifier)  | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 09:31 |
| S23 | 1187 | (348/222.1).CCLS.   | US-PGPUB;<br>USPAT | OR  | OFF | 2006/12/14 09:31 |
| S24 | 26   | S23 and (differential adj4<br>amplifier)  | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 09:33 |
| S25 | 752  | (348/294).CCLS.   | US-PGPUB;<br>USPAT | OR  | OFF | 2006/12/14 09:33 |
| S26 | 145  | S25 and (average or averaging)  | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 09:34 |
| S27 | 145  | S25 and (average or averaging or<br>averages)   | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 09:42 |
| S28 | 91   | (348/298).CCLS.   | US-PGPUB;<br>USPAT | OR  | OFF | 2006/12/14 09:49 |
| S29 | 438  | (348/302).CCLS.   | US-PGPUB;<br>USPAT | OR  | OFF | 2006/12/14 09:49 |
| S30 | 141  | S29 and ((average or averaging or<br>averages) or "differential<br>amplifier")                                | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 10:15 |
| S31 | 0    | ((differential amplifier) near<br>(average or averaging or<br>averages)).ab.                                  | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 10:16 |
| S32 | 1438 | (pixel and (averaging or average<br>or averages)).ab.   | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 10:17 |
| S33 | 14   | S32 and "differential amplifier"  | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 10:22 |
| S34 | 43   | ((pixel or pixels) adj6 "differential<br>amplifier") and (average or<br>averages or averaging)                | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 10:35 |
| S35 | 1    | "differential amplifier" near<br>(average or averages or<br>averaging).ab.                                    | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 10:36 |
| S36 | 932  | "differential amplifier" with<br>(average or averages or<br>averaging)  | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 10:37 |
| S37 | 32   | ("differential amplifier" with<br>(average or averages or<br>averaging)) near (pixel or signal or<br>voltage) | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 11:06 |
| S38 | 932  | ("differential amplifier" with<br>(average or averages or<br>averaging)) and (pixel or signal or<br>voltage)  | US-PGPUB;<br>USPAT | AND | ON  | 2006/12/14 11:07 |

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|     |       |   |                 |     |     |                  |
|-----|-------|---|-----------------|-----|-----|------------------|
| S39 | 15    | ("differential amplifier" with (average or averages or averaging)) near signal  | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:09 |
| S40 | 1     | using adj3 "differential amplifier" adj3 averaging  | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:10 |
| S41 | 3     | (use or used or using) adj3 "differential amplifier" adj5 (average or averaging or averaged)  | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:11 |
| S42 | 4632  | differential amplifier with (average or averaged or averaging)  | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:12 |
| S43 | 31    | (differential amplifier with (average or averaged or averaging)) near (signal or voltage or pixel)                                  | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:13 |
| S44 | 37    | ("differential amplifier" with (average or averaged or averaging)) near (signal or voltage or pixel)                                | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:19 |
| S45 | 207   | "differential amplifier" adj5 average   | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:19 |
| S46 | 67280 | ("348").CLAS.   | US-PGPUB; USPAT | OR  | OFF | 2006/12/14 11:19 |
| S47 | 25    | S45 and S46   | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:23 |
| S48 | 550   | "differential amplifier" with (use or used or using) with (obtain or obtained or obtaining)   | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:24 |
| S49 | 19    | "differential amplifier" with (use or used or using) with (obtain or obtained or obtaining) with (average or averaging or averaged) | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:36 |
| S50 | 1     | ("20030052982").PN.   | US-PGPUB; USPAT | OR  | OFF | 2006/12/14 11:39 |
| S51 | 0     | ("I30notI32").PN.   | US-PGPUB; USPAT | OR  | OFF | 2006/12/14 11:39 |
| S52 | 182   | S45 not S47   | US-PGPUB; USPAT | AND | ON  | 2006/12/14 11:39 |
| S53 | 4892  | "operational amplifier" and averaging   | US-PGPUB; USPAT | AND | ON  | 2006/12/14 13:56 |
| S54 | 36    | "operational amplifier" and averaging.ti.   | US-PGPUB; USPAT | AND | ON  | 2006/12/14 13:57 |
| S55 | 0     | ("operational amplifier" and (average or averaged or averaging)).ti.  | US-PGPUB; USPAT | AND | ON  | 2006/12/14 13:59 |

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|     |      |  |  |     |     |                  |
|-----|------|--|--|-----|-----|------------------|
| S56 | 1    | ("6130712").PN.  | US-PGPUB;<br>USPAT                     | OR  | OFF | 2006/12/14 13:59 |
| S57 | 8    | ("1117250").PN.  | US-PGPUB;<br>USPAT;<br>EPO;<br>DERWENT | OR  | OFF | 2006/12/14 15:16 |
| S58 | 297  | (348/243).CCLS.  | US-PGPUB;<br>USPAT                     | OR  | OFF | 2006/12/19 14:40 |
| S59 | 2    | "10290397"   | US-PGPUB;<br>USPAT                     | AND | ON  | 2006/12/19 14:41 |
| S60 | 1    | ("6974973").PN.  | US-PGPUB;<br>USPAT                     | OR  | OFF | 2006/12/20 06:50 |
| S61 | 189  | (348/79).CCLS.   | US-PGPUB;<br>USPAT                     | OR  | OFF | 2006/12/20 09:11 |
| S62 | 54   | (348/80).CCLS.   | US-PGPUB;<br>USPAT                     | OR  | OFF | 2006/12/20 09:11 |
| S63 | 1    | ("6974973").PN.  | US-PGPUB;<br>USPAT                     | OR  | OFF | 2006/12/20 10:13 |
| S64 | 1    | ("6974973").PN.  | US-PGPUB;<br>USPAT                     | OR  | OFF | 2007/05/10 14:04 |
| S65 | 0    | S64 and mirror   | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 14:05 |
| S66 | 0    | S64 and mirrors  | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:10 |
| S67 | 0    | ("sampleandhold").PN.  | US-PGPUB;<br>USPAT                     | OR  | OFF | 2007/05/10 15:10 |
| S68 | 156  | "sample and hold"  | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:19 |
| S69 | 8194 | "sample-and-hold"  | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:19 |
| S70 | 282  | S69 same (camera or imager)  | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:19 |
| S71 | 1455 | S69 and (camera or imager)   | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:20 |
| S72 | 3529 | "sample-and-hold" same amplifier                                     | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:20 |
| S73 | 1029 | "sample-and-hold" same (amplifier<br>with differen\$5)               | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:29 |
| S74 | 146  | S73 and (camera or imager)   | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:20 |
| S75 | 706  | "sample-and-hold" same (amplifier<br>with operational)               | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:29 |
| S76 | 0    | "sample-and-hold" same (amplifier<br>with operational) same averg\$4 | US-PGPUB;<br>USPAT                     | AND | ON  | 2007/05/10 15:30 |

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|     |        |   |                 |     |     |                  |
|-----|--------|---|-----------------|-----|-----|------------------|
| S77 | 31     | "sample-and-hold" same (amplifier with operational) same averag\$4      | US-PGPUB; USPAT | AND | ON  | 2007/05/10 15:33 |
| S78 | 301    | (348/243).CCLS.   | US-PGPUB; USPAT | OR  | OFF | 2007/05/10 15:33 |
| S79 | 10     | S78 and @pd>"20061010"  | US-PGPUB; USPAT | AND | ON  | 2007/05/10 15:33 |
| S80 | 327    | (348/243).CCLS.   | US-PGPUB; USPAT | OR  | OFF | 2008/01/22 10:54 |
| S81 | 292    | S80 and @ad<"20031103"  | US-PGPUB; USPAT | AND | ON  | 2008/01/22 11:27 |
| S82 | 10     | S81 and (dark or black) with bottom                                     | US-PGPUB; USPAT | AND | ON  | 2008/01/22 11:29 |
| S83 | 1      | "5608455".pn. and bottom  | US-PGPUB; USPAT | AND | ON  | 2008/01/22 11:29 |
| S84 | 1      | "6377304".pn. and (dark or black)                                       | US-PGPUB; USPAT | AND | ON  | 2008/01/22 11:51 |
| S85 | 192478 | "348"/  | US-PGPUB; USPAT | AND | ON  | 2008/01/22 11:51 |
| S86 | 111956 | ("348").CLAS.   | US-PGPUB; USPAT | OR  | OFF | 2008/01/22 11:51 |
| S87 | 41214  | ("396").CLAS.   | US-PGPUB; USPAT | OR  | OFF | 2008/01/22 11:51 |
| S88 | 557    | (S86 or S87) and ((black or dark) with pixel\$2 with array)             | US-PGPUB; USPAT | AND | ON  | 2008/01/22 11:52 |
| S89 | 7      | (S86 or S87) and ((black or dark) with pixel\$2 with array with bottom) | US-PGPUB; USPAT | AND | ON  | 2008/01/22 16:26 |